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# STRATEGY RESEARCH PROJECT

# RISK, RELEVANCE AND ARITHMETIC, RATIONALES FAVORING RESERVE COMPONENT COMBAT FORCES

BY

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# Risk, Relevance and Arithmetic, Rationales Favoring Reserve Component Combat Forces

by

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United States Army War College Carlisle Barracks, Pennsylvania

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## **ABSTRACT**

AUTHOR: Stephen D. Collins

TITLE: Risk, Relevance and Arithmetic, Rationales Favoring

Reserve Component Combat Forces

FORMAT: Strategy Research Project

DATE: 23 April 1998 PAGES: 48 CLASSIFICATION: Unclassified

Reserve component combat forces can leverage the National Military strategy, if applied in the ends, ways and means analysis, in this case, using Risk, Relevance and Arithmetic. Arguments in each area proceed with reserve force readiness issues set aside. Beyond that bias, the methodology of the treatise attempts objectivity, while presenting pro reserve combat force attributes and usage.

The paper discusses risk appraisal and how the current National Military Strategy may have erred. Comparisons use a capabilities and a threat based approach. A critique of an assumed risk appraisal process unfolds a possible "sliding reinforcer" flaw.

Relevance criteria applied to the reserve component include the national will as a United States center of gravity. Cultural and technological attributes combine with creative employment methods to explain the inextricable relevance of the reserve components.

Several cost analyses round out the Arithmetic portion of the thesis. This analysis uses both macro and micro examples of leverage provided by the reserve components. Total force structure, end strength, unit cost and personnel cost arguments array as simple a comparison as possible.

Conclusions speak to cooperation, interdependency and value added between the active and reserve components.

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# RISK, RELEVANCE AND ARITHMETIC, RATIONALES FAVORING RESERVE COMPONENT COMBAT FORCES

Adaptation to changing conditions is the condition of survival. This depends on the simple yet fundamental question of attitude. To cope with the problems of the modern world we need, above all, to see them clearly and analyze them scientifically. This requires freedom from prejudice combined with the power of discernment and with a sense of proportion... Discernment may be primarily a gift, and a sense of proportion, too. But their development can be assisted by freedom from prejudice, which largely rests with the individual to achieve—and within his power to achieve it. Or at least to approach it. The way of approach is simple, if not easy—requiring, above all, constant self-criticism and care for precise statement.

-Sir Basil H. Liddell Hart

### BACKGROUND

Achieving Hart's precision, challenges writers to step beyond their passions and prejudices. Acknowledging perspectives, as cases arise, seeks to "at least to approach it." Condensing a subject such as the National Military Strategy, and its constraints, seems a task too large. If this treatise attempted to probe the depths of every nuance, "too large" is both an understatement and an oversimplification. Probing with an alternative is the methodology, but why? Because national security, is ever important and never assured. Because assumptions, programs and consequences must be constantly tested.

The Risk, Relevance and Arithmetic factors, are individual and interdependent components of the National Military

Strategy; this strategy can be better balanced by applying reserve component combat units to these factors.

Risk, Relevance and Arithmetic is a focused paraphrase of the objectives, concepts and resources components of the current National Military Strategy. Critics and proponents alike recognize imperfections in the documents: the National Military Strategy, the Quadrennial Defense Review and the Chairman's Planning Guidance<sup>1</sup>. Though intrinsically easier to stay the course, maintain the process and assume success, scanning the future, the past and the present horizons usually adds diversity and hopefully creates opportunities.

The strategists sought balance as a prerequisite to these documents. What current National Security Strategy,

Quadrennial Defense Review and National Military Strategy

undoubtedly achieved, was continuity. This is a tribute to the authors and to the process. Continuity, however, does not enhance success as well as balance and therein foments a congenital risk. Such risk is easily promulgated through the strategy. As shown by this diagram:

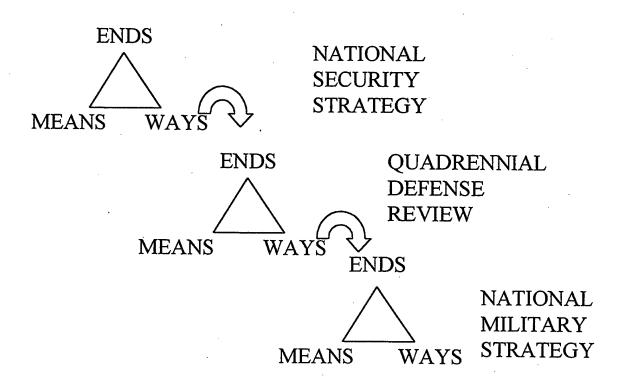


Figure 1 Policy Linkage Diagram

The linking pattern from document to document is obvious, the subordinate ends are the superior ways, the promulgation of assumptions, correct or flawed, is unavoidable. One may never know whether a particular inherent flaw is serious enough to endanger national or international collective security. It may even be more probable that the risk of internal failure predominates.<sup>2</sup>

The perspectives which lead to the current concepts are both learned and professional. The fact that they are perspectives and that no perspective carries infallibility is implicit; ergo, this alone justifies the discussion of alternatives, hopefully released from static paradigms.

Before the framework of Risk, Relevance and Arithmetic collects the impediments of minutia, comments on overarching assumptions have utility. The status quo National Military Strategy, Quadrennial Defense Review, Defense Planning Guidance and Chairman's Program Recommendation all assume that the reserve components (Army) are not and cannot be ready for combat. This assumption further promulgated itself through Planning Programming Budgeting and Execution System (PPBES) in war plans, Program Objective Memoranda and each current year's budget. This un-readiness assumption is peculiar to a single component, the Army. Sister services have created successful, combat proven "total" forces. Ironically, by whatever term, the Army has proven the "total force" concept by both demonstration and endurance, i.e. by war and by time, with Operation Desert Storm as an exception.

The readiness argument underscores a cultural separation between the active and reserve components of the Army;<sup>3</sup> there has been abundant rhetorical and empirical fault on both sides of the argument. As an alternative, readiness arguments (the numbering of days to deployment and/or employment) are academically set aside. For every article or opinion on one side,<sup>4</sup> there is an opposing<sup>5</sup> article with the reverse passion. This dichotomy in itself, portrays the problem; a problem that appears more culturally fashionable than systemically significant.

This paper simply reverses the negative assumption. This reversal does not disparage the ideologies which shaped the argument. Every leader brings a philosophy and a vision to his "watch". But by suspending the un-readiness assumption, reserve component attributes can be factored in to the interdependent relationship which precede the strategy documents.

#### RISK

Risk - a dangerous element or factor; the possibility of injury, damage or loss.

All military strategies have risk as a component of their rationale. But risk and its many factors are difficult to quantify, and in the final analysis, become subjective. This subjectivity often brings rationalization to the analysis.

Decision makers may tend to fall into traps; such as starting from the wrong point in the process. Since humans are creatures of both logic and habit, they sometimes use status quo conditions and apply them in an inverse, incorrect analytical sequence. This status quo could be a force structure, a capabilities paradigm or a policy. Stanton K.

Tefft refers to this as a sliding-reinforcer, trap. For example, a desirable policy survives because conditions for its success are rationalized or assumed to exist. This fault is commonly known as "working for an answer".

One such apparent assumption used was a large active force, large relative to the pre-1980's peacetime forces. Using this static force structure, be it the base force or a later version, the Army decision makers assumed away the reserve component combat forces and began the risk analysis process, albeit, with one third of the result assured. Preconceived8 scenario variations progressed through win-hold-win, two simultaneous Major Regional Contingencies and then, two nearly simultaneous Major Theater Wars. All of these scenarios assumed "the unlikely contingency of two Major Theater Wars", according to the National Defense Panel's report. This static scenario rationalization is a classic example of Dr. Teft's sliding-reinforcer trap. So trapped, Army decision makers could not avoid promulgating pre-existing imbedded paradigms, specifically, a large active component and no reserve combat forces.

A cursory examination of risk assessment points to careful avoidance of this type of trap. The risk analysis steps which Dr. Steven Metz outlines in his article, "Analyzing Strategic and Operational Risks," Military Review, November 1991, are:

(1) "identifying the source and type of risk, (2) assessing the level of acceptable risk and (3) attempting to ameliorate the risk." A plethora of literature about current and future threat is and has been available. Easily recognizable risk

factors have changed dramatically since 1989. However, Cold War assumptions and models continue in use.

Step one, should be and open-ended source and type array of threats. Certainly, total risk analysis is well beyond the scope of this treatise. However, following the description of Dr. Metz's analytical steps serves to illustrate the benefits of proper sequence upon the development of factors and outcomes. (1) Identification of the specific forms of risk is the first step in determining decisive risk. "Decisive risk threatens the centers of gravity...whereas... Indecisive risk increases campaign duration or furthers operational cost". fairness to the previously criticized decision makers, "too few troops/ force structure is nearly flaunted as a risk, vis a vis an amelioration tool, in step one of the analytic process. However, the strategist should hold objectivity dear, until the process is completed and then apply the Army's extensive structuring system, DTOLMS<sup>10</sup> (Doctrine, Training, Organizational Design, Leader Development, Material Modernization, Soldier Systems). This system would use the risk to tailor doctrine, et al, in the third or amelioration step.

Risk acceptability determination, as a second step, lends itself to some more finite, yet still non-quantifiable relationships. Acceptable risk almost seems an oxymoron for a country and a public so averse to the casualties which accompany both war and contingency operations. Specifically,

because the United States enjoys a position of strength in the world, the U.S. is more risk averse, for "weaker antagonists must accept greater strategic ... risk." In assessing or defining risk acceptability, Dr. Metz recommends a framework: resource balances, mobilization level, strategic and operational trends, length of conflict or war, strategic culture, political factors, public support, commanders personality, troop quality and technology. Each of these factors acquire relative weights or coefficients given the situation. The weights depend on the factor specific variations:

| Factors           | Var         | Rationale      |               |  |
|-------------------|-------------|----------------|---------------|--|
| Resources         | inadequate  | abundant       | affordability |  |
| Mobilization      | constrained | unlimited      | confidence    |  |
| Trends            | favorable   | unfavorable    | motivation    |  |
| Length            | short       | long           | anxiety       |  |
| Culture           | anarchy     | leadership     | confidence    |  |
| Politics & Public | opposing    | supportive     | justified     |  |
| Commanders        | aversion    | high tolerance | motivated     |  |
| Troop Quality     | low         | high           | confidence    |  |
| Technology        | incapable   | capable        | confidence    |  |
| Strike Damage     | collateral  | precision      | confidence    |  |

 $\texttt{LOW} \leftarrow \begin{array}{c} \texttt{RISK} \\ & \rightarrow \texttt{HIGH} \end{array}$ 

Table 1 Risk Acceptability Factors

Omitting the Politics and Public factor, one of the hardest lessons learned of the Vietnam War, moves acceptability toward the opposing versus supportive end of that factor's continuum. An opposing public is unacceptable, for national will is every nation's strategic center of gravity in war. Clausewitz referred to this will as the "moral element." The reserve components carry the public support to allow a high risk environment. attribute is part of the constitutional intent of the framers. 13 Latter strategists such as Harry Summers in his book, On Strategy, explains in his chapter on national will, "For most of our history, the support of the American people was built into our very force structuring. The Army consisted of a rather small standing force, backed up first by the reserve forces of the National Guard and Army Reserve, and ultimately by nationwide conscription." During the Vietnam era, no one accurately gauged the public's risk acceptability level until it had been exceeded.

What is the gauge, how is the strategist to proceed? Risk analysts from other fields use *performance* as an indicator of acceptability, graphic analogy better indicates the concept. Risk can be graphed:

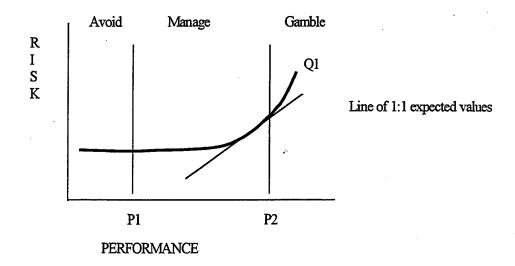


Figure 2 Risk/Performance

Most risk managers stay in between the points P1 and P2, while gamblers or risk avoider seek the extremes. 14 Note that the curve Q1 relates risk and performance. If the Metz framework was used to relate risk and acceptability factors another graph could be produced.

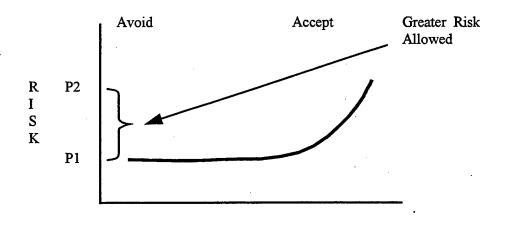


Figure 3 Risk/Acceptability

**ACCEPTABILITY** 

Comparable to the risk/performance graph, higher risk may be taken if acceptability level is higher, similarly to taking higher risk in order to maximize performance. Since reserve component mobilization both requires and provides higher risk acceptability levels, greater risk may be taken.

On a strategic level this greater risk may be viewed as self-created because of a longer reserve component employment requirement or greater human impact of possible mass casualties in one geographic area. Or it may be viewed as an opportunity to use the military element of power with popular support. Or it may be viewed as a credible solution during a period of a low risk strategic lull. Whichever view is taken, non-linear thinking recognizes the existence of the positive dynamic which the reserve component carries.

Dr. Metz's final step is amelioration of the risk by "tangible or intangible" means. These methods roughly parallel the resource and concept portions the standard elements of strategy. Dr. Metz notes that "overwhelming resources obviously minimizes risk". His amelioration step also calls on "overall coherence and creativity of the plan". Interpretation of these amelioration characteristics will vary widely among strategists. The thesis supporting points are that reserve component combat forces are needed factors. These factors should be used when considering all three steps in the risk appraisal by: 1)

protecting the national will as a center of gravity (decisive risk) 2) raising risk acceptability level by a supportive charter (Constitutionally and experientially) and 3) easily ameliorating the already low risk of a strategic lull.

#### RELEVANCE

Relevance - pertinent to the matter at hand; sufficient to support the cause (Scot's law).

The matter at hand for the National Military Strategy can be framed many ways. This strategy's bottom line mission of "Fighting and Winning Our Nation's Wars" has been interpreted as two Major Theater Wars and Small Scale Contingencies. Some call for reserve component exclusion from the fight, 15 others call for the reserve component to do all fighting, after the halt phase. 16 As division structures get smaller, lighter and more high tech, sheer quantity limitations imposed on a smaller force loom large. Regardless of lethality, agility or deployment improvements that are achieved, the Operations Tempo (OPTEMPO) of an "engagement" policy may exceed the capabilities a cost constrained force. 17

The future appears ever demanding, the current two percent of the active component which is engaged, i.e. the OPTEMPO rate, shows more propensity to increase rather than decline. For example, Canada is up to a ten percent OPTEMPO rate and has only a sixty thousand soldier total force. Multiple Small Scale

Contingencies (SSC) are as feasible, if not more so, than two Major Theater Wars (MTW); 19 the possibility of one MTW accompanied by multiple simultaneous SSC's presents just as imposing a mission/threat as the two MTW scenario. Consequently, there is more mission than the active component or the reserve component can meet; the total assets of both forces are required.

One reason the reserve component is especially relevant to the current MTW and SSC threat is because of modernization and training time. The transition to the 2010 force and the Army After Next could be accelerated, if more of the threat amelioration was shared with the reserve component. The Quadrennial Defense Review recognized this situation in its "Path 2" proposal, but it did not recognize the reserve component as a solution. This path was later favored by the National Defense Panel.<sup>20</sup>

Strategic, like economic, tradeoffs are difficult.

Proposals that the active component should trade force structure and that the reserve component should slip modernization, in order to simultaneously meet current and future missions require more discussion than this paper. Suffice it to say that each component should continue ancillary missions like peacekeeping and homeland defense while cooperatively working strategic current and long range missioning and hand-off schemes.

Ironically, both the active component and reserve components

would gain relevance if there was enough trust and cooperation to dialogue without the fear of rampant protectionism.

National will played a role in the previous discussion of casualty aversion and risk acceptability. Besides this cause and effect relationship a deeper connection, or relevance, exists between national will and the reserve components. relationship has the significance of a touchstone value. consonance is possible because the reserve component soldiers, their families, their employers, their employees, their students, their co-workers are the national will. Reserve component (citizen soldiers) pervade the boardrooms and lunchrooms. is none of the feared schism between the people and the military here. 21 The reserve component's military-cultural homogeneity is more than a social phenomenon, it is the basis for Sun Tsu's "moral influence" which brings "people to be in harmony with their leaders, so that they will accompany them in life and unto death without fear of mortal peril." The national will develops in the workplace, hometowns, and classrooms by citizens, citizen soldiers, young and old, using security perspectives from hawk todove. Reserve component soldiers cannot avoid this strategic relevance, they live in it. Conversely, they are very instrumental in spreading military relevance into the community and shaping the national will. A case could be made for higher numbers of reserve component soldiers as a means of putting military experience into the population. Such a set of

experienced soldiers, engrained with a sense of national security, may be able to add security back to the national priorities.

Polls show national priorities are the economy, social programs and the environment, a list woefully lacking, or perhaps, taking security for granted. This priority agenda begets a constrained resource environment that has capped budget numbers, causing real budget value to steadily decline.<sup>22</sup>

The reserve component survives in an austere environment most of the time. Only during the 1980's was training unconstrained. The budgetary relevance of a 367,000 soldier, eight to ten division equivalent force with 67% of the Army's artillery and many more units, for just five percent of the Army budget should speak for itself. Several reserve component resource economies will be more evident in the Arithmetic section of this paper. What is not evident is the tremendous contribution in free service, transportation, communications, manpower and material which reserve component soldiers donate to duty every day. This, "whatever it takes", "mission oriented" dedication brings more than resource relevance to the reserve components, it brings mission accomplishment.

The synergism of the citizen soldier is not lost on developing and emerging countries. The countries which have suffered under dictatorships, whether civilian or military, embrace the dual relationship that the reserve component brings.

The reserve component unit brings a non-threatening working model of security, service and partnership to former soviet states and to Latin America. This non-threatening nature is a condition of relevance in such fragile relationships. This type of shaping and engagement through training and through nation building projects buys stability and expertise wherever it is practiced.

This practice is also a two for one activity. These deployment, employment and power projection rehearsals are needed to raise both urgency and readiness levels. The deployment and employment paradigms of the past are easily improved through these rehearsals and the innovations which they force. For example, normal mobilization plans call for small cells forward, actual employment of reserve component units may be better served by larger increments forward or by infiltration of elements. Using innovative employment techniques flattens learning curves associated with fluid situations and puts units closer to the battle earlier than the D plus a certain number of days paradigm.

Increments inherently become split bases, another reserve component strength. One could call these split bases power projection platforms and eliminate the "middle man" or interim stop at mobilization sites for re-vamping administrative data and redundant certifications. Such power projection could aid in helping the active component fight for the additional base closures that they desire. These relevant split base operations are practiced every day, from armory to armory, from training

site to home station, from headquarters to units, across state lines, from the Continental United States(CONUS) to Europe, Central and South America.

These operations assist the active component in reducing its OPTEMPO. Reserve component relevance to these Operations Other Than War and SSC missions should be considered within an operational concept. SSC's are always a relevant mission to the reserve component as a Force, and sometimes relevant to individual reserve component units. This is because the nature and size of the reserve component Force (367K ARNG, 215K USAR) allows for many volunteer opportunities, i.e. not the same people, not at the same time (2 or 3 week rotations excluded). These opportunities give the reserve component unit a better soldier back. Unit integrity and training issues can be mitigated by a stateside train-up similar to a two week Joint Readiness Training Center rotation.

Commercial technology has assisted these accomplishments tremendously; and these extended training and operational conditions have been successfully practiced for years. The ... National Defense Panel (NDP) recognized this proven capability in recommending that the guard take over U.S. Army Southern Command completely. Distance mitigating technology plays a significant role in the reserve component. Staff coordination, operations orders, reports, task organization, crossleveling soldiers and equipment occur over great distances by necessity. Practice with

these extended conditions may be one of the reasons that the 35th Division (spread across KS,KY,MO,NE,IL,CO) scored a "touchdown"<sup>24</sup> against Ft. Leavenworth's World Class Opposing Force during a 1996 Warfighter exercise. For example, there was no consolidated face to face ramp up or rehearsal until days before STARTEX (Start of Exercise), but the technologically savvy reserve component players had passed so much data over extended lines that the face to face/ short lines were relatively, much simpler. This same technological savvy could make active component liaison officers, with digital to voice conversion capability, very effective in bridging interoperability gaps that chronically hinder relevance among active component, reserve component, Joint, and coalition forces.

The state-of the-art civilian techno-culture, in which the reserve component resides, will have little trouble keeping pace with military leapahead technologies that are developed and fielded on life cycles four to ten times slower than civilian counterparts. The civilian workforce has had to learn leapahead, just-in-time, team leadership and the like concepts just to keep their jobs. Bringing or transferring these skills to mobilization contains as many more synergisms than problem sets.

Whether relevance comes in the tangible resources of divisional units, force wide volunteers, a technologically savvy culture or the intangible concepts of national will and creative

deployment methods, reserve component combat units have inextricable relevance.

### ARITHMETIC

Arithmetic - the method or process of computation with figures.

A simple definition that belies a complexity accommodating challenges for all. Adages relating 'liars and figures,' suspicions of bias and manipulation bring hard lessons learned to mind, for everyone. This section, somewhat naively, attempts to bridge the complexity gap and bring simplicity to the situation.

Trying to make business or arithmetic sense of strategy, structure and resources is not a new task. A General Accounting Office study, in 1983, tried a similar hypothesis. It found no relationship and stated that "goals and dollars" could not be related. The problem is that factors (strategy, structure and resources) preexist the process. And all are interdependent, all bureaucratically and nationally political and all are averse to change.

Beginning with numbers without six zeros may be a good starting point. The active component currently has ten combat divisions and the reserve component has eight combat divisions. The MTW scenario calls for an overwhelming force of 5 1/3 divisions on line within 75 days for each major theater. Since the Army only has only 10 divisions and the reserve component combat divisions are ignored, where is the overwhelming force

needed for the two theaters such as Desert Storm? (more than eight division equivalents used) 27 The Marines have three division equivalents, so the total is now 13 divided by two theaters, the numbers appear better. However, another consideration is a planning rule used by many in the Army, the 3:1 rule. Not found 28 in doctrine or Program Objective Memorandum (POM) or Time Phased Force Deployment Data (TPFDD), this experiential rule of thumb underpins part of the justification for a 520,000 space active Army structure. rule says that it takes three soldiers in structure to produce one soldier in battle, since one third will be preparing, one third will be employed and one third will be recovering. Applying that rule to the previous 5 1/3 division requirement quickly outpaces the active component warfighting unit capabilities, even for one MTW ( This shortage is worse if forward deployed strategic forces are not counted, because shifting them could invite a second MTW.)

The 3:1 rule was suspended for Desert Storm, i.e. no units and no soldiers would return (recovering third) until the end of hostilities. This leaves a 2:1 rule and still a shortage of 8 1/3 divisions (5 1/3 divisions x 2 (MTW) x 2(2:1 rule) = 21 1/3 divisions) - 13(10 Army + 3 USMC) = 8 1/3 division (shortage)). The appearance of this "obvious" shortage may be just what most force justifiers desire, in order to argue for more. However, too large a shortfall has a catch, the reserve component

divisions omission could be reversed and solve the equation (8 approximates 8 1/3).

But, if world conditions changed, the two MTW threat could disappear, then the active component, having acknowledged the reserve component capability, would be faced with the reserve component as a competitor for missions and resources. This competition would favor the reserve component, as illustrated later.

Compounding the situation, the strategy, structure and resources are not static. All must move to the future more quickly<sup>29</sup> absorbing constant economic, demographic and technological change. The pieces are all there, how can they be optimized, modernized or remain relevant to internal and external conditions? What are the inhibitors?

Many point to a \$250 billion defense budget as the biggest constraint. The size of Department of Defense operations are at the same time, constrained and mindbogeling. The \$250 billion figure could be compared to the U.S. Gross National Product on an historical basis and it would show a substantial drawdown from the 1980's, ergo constrained. However, it could be compared dollar for dollar to the nearest peer competitors around the world and it would look exorbitant. The latter seems to be a strategic comparison, not that parity is better than being a super power, but how much is enough?

| COUNTRY       | DOLLARS         |  |  |
|---------------|-----------------|--|--|
| United States | 265,823,000,000 |  |  |
| North Korea   | 5,330,000,000   |  |  |
| Iran          | 3,301,000,000   |  |  |
| Iraq          | 1,224,000,000   |  |  |
| Libya         | 1,272,000,000   |  |  |
| Cuba          | 686,000,000     |  |  |
| China         | 34,684,000,000  |  |  |
| Russia        | 69,537,000,000  |  |  |

Table 2 Regional Power Defense Expenditures 30

The figures may age but the relationship is constant enough that the obvious impact endures, even if adjusted for differing currency values.

The 1980's buildup that created a multi-trillion dollar national debt is something that, right or wrong, the American public will not tolerate again. The case in point is that in 1989 a U.S.A Today poll gave President Bush a 91 percent approval rating. In November 1991, a sluggish economy caused a superset of those same pollees to vote him out of office. The 1994-1998, \$264 billion to \$254 billion DOD budget decline was the Clinton administration's compromise to avoid the same fate.

Congressional Budget Office figures show marginal increases through 2002. This constrained defense budget has left DOD

underfunded by \$150 billion and that Future Years Defense Program optimistic estimates will lead to billions in overprogramming. 32

Solutions are hard to find, the infrastructure part of the budget cuts have not materialized and may never be bureaucratically achievable. Federal budget surplus discussions speak of the peace corps, tax reduction, education, health care, social security and even investigations, never of DOD increases. (except for current year contingency operations funding)

The problem set is then, the complexity of management and the need to change from within. No federal agency or commercial enterprise is immune from change or the inherent resistance to change. Putting off the problem by falling behind<sup>34</sup> or borrowing from modernization will soon, if not already,<sup>35</sup> take the services both into a hollow/fragile force and out of a preeminent position.

A hollow force is a very serious situation. Hollowness can be defined in several ways. Simply subtracting a 480,000 active Army endstrength from a 520,000 force structure leaves a 40,000 soldier gap of "hollow" or "unmanned" positions in units.

Reducing operational funds builds in manpower inefficiency e.g. if tank crews, air crews and mechanics are all restricted from performing their primary skills, then any substitute duty performed is, at least, inefficient. Granted that putting a

price on freedom is an invitation to catastrophe, but it appears that, that has already been done, \$250 billion.

Other changes are coming, they will come after the costs are paid for the attitudes, the awareness and the skills to work together. These costs can be measured in risks, dollars or emotions but each could be mitigated through cooperation and synergism within DOD. Everyone must contribute to these changes. Discussing comparative numbers points out contributions which the reserve components can bring the solution.

Looking at structure, the strategist could examine capability in this way. Along a timeline, the phases of a MTW conflict are--

Several capabilities are needed. 1) A rapid response or speed requirement to accomplish the Halt phase. The rapid response requirement is in hours or just a few days. The Report on the Quadrennial Defense Review estimates the rapid response requirement is 11% of the force. The reserve component can participate in this force on a very limited basis, a few high priority units manned by certain soldiers who expect this short notice mission and have the flexibility to prepare and participate; and with individual soldiers volunteering for duty (such as providing enhanced twenty-four hour operations in an active component unit).

2) Another capability is the overwhelming<sup>38</sup> force discussed earlier. The 5 1/3 division force has this mission and a timeline that can be viewed and wargamed. The in place, overwhelming force requirement is 75 days, but the moment on the timeline for the third phase, the counterattack is set by the civilian political leadership (President Bush's ultimatum).<sup>39</sup> Consider that reserve component combat divisions have historically participated in all of the U.S.'s major wars, many times deploying before the active forces.<sup>40</sup> Even given the unreadiness assumption, 90-130 days has been determined by the Institute for Defense Analysis<sup>41</sup> as the time required for the 49th Division Texas Army National Guard to be ready. So along the timeline, the active component and reserve component divisions would theoretically enter at different points in time:

|      | 75 days<br>↓ | $\leftarrow \Delta \rightarrow$ | 120 days<br>↓ |               |
|------|--------------|---------------------------------|---------------|---------------|
| HALT |              | Buildup                         |               | Counterattack |

Viewed in this sense, time can be further wargamed.

Assuming the rapid response percentage is valid, and that heavy
lift improvement objectives of 2002 are met, 42 and considering
the most recent ground war timeline, Operation Desert Storm (202
days), 43 75 or 120 days is either already available or can be
made available by the political instrument of power. 44

What this 55 day difference actually costs, is another quandary, and may be impossible to objectively calculate. Numbers do however, have a quality of their own and a few comparisons are offered. As a preface, validity of available cost figures for combat organizations has been widely debated. The arguments generally tend to favor whichever side presents the numbers. Comparison ratios range from eight dollars to one, 45 to two dollars to one, depending upon what kind of costs are included. Speculative cost skewing factors include "one time" major modernizations opposing the reserve component position and base O&M funds and Table of Distribution and Allowance (TDA) costs, opposing the active component position. The figures presented here attempt to exclude extremes for either position.

| Divisions | AC Cost | NG Cost |
|-----------|---------|---------|
| 5         | 6       | 1.25    |
| 6         | 7.2     | 1.5     |
| 7         | 8.4     | 1.75    |
| 8         | 9.6     | 2       |
| 9         | 10.8    | 2.25    |
| 10        | 12      | 2.5     |

Figure 4 Division Cost Comparison

## Produce this graph:

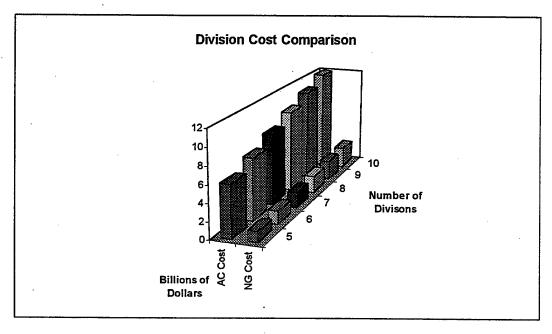


Figure 5 Division Cost Graph

The three or four to one ratio, if valid, has the potential of saving up to two thirds of the warfighting unit costs and a representative amount of supporting funds.

For example, a smaller force requires less recruits. The Army spends \$2715 (\$222.7M<sup>46</sup>/82,000 mission 1997) per recruit from the Operations and Maintenance budget and the Army National Guard spends \$491 (\$31.2M/63,495) from this budget area. The costs do not count recruiter pay or soldier training for either component. These figures vary so widely because, the community based reserve component relies on its membership for a large portion of the recruiting burden.

Another value of active component downsizing is that troops would be forced from TDA units into deploying units by necessity.

There would also be a reduction of the historically high 47 U.S. tooth to tail ratios. The 10 Division Army plus Corps units could be estimated by this formula  $(18000 \times 10) + (5000 \times 2) =$ 190,000 warfighting troops. The three to one rule requires  $394,000(18000 \times 21 1/3 \text{ divisions} + (5000 \times 2) = 394,000)$  The Army Guard has 144,000 divisional troops. The United State Marine Corps has 54,000 divisional troops. 190,000 + 144,000 + 54,000 =388,000 or 6000 less than required not counting many important combat support and combat service support units. The equations are too simple, there must be something wrong. How could reserve component combat units be left out of warplans with a need this large? Is structure so important and is fear and distrust so great that war plans are allowed to fall short? Granted, these large numbers and simple manipulations should be criticized as broad brushing a intricate calculation. These like other analyses are skewed by minor adjustments in the assumptions. Exactly the point, the un-readiness assumption broad brushed away the reserve component combat unit contribution to the current National Military Strategy.

One final arithmetic comparison on a micro level may be more valid. Many analysts compare military budget dollars with total soldiers, this is unfair, given the cost of high tech equipment and the like. However the reserve component soldier and the active component soldier use roughly the same equipment. Cost comparing just two hypothetical active component soldiers'

careers to two hypothetical reserve component soldiers' careers paints a severe contrast, even with several arguable assumptions. Assume that, the figures presented do not show the reserve component soldier's pay for schools that are in addition to IDT (Inactive Duty Training) and AT (Annual Training); correspondingly, the figures do not show the active component soldier's health benefits or those for his/her dependents. Assuredly there are other inaccuracies, but the pay comparison itself overshadows the marginal. Each diagram contains the same methods and inherent inaccuracies:

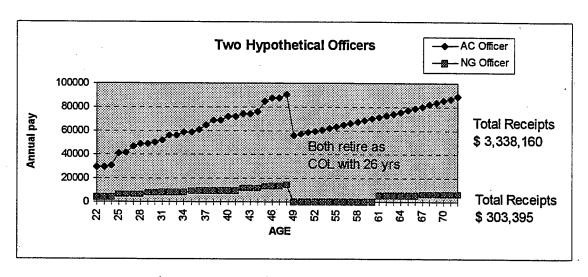


Figure 6 Officer Pay Comparison

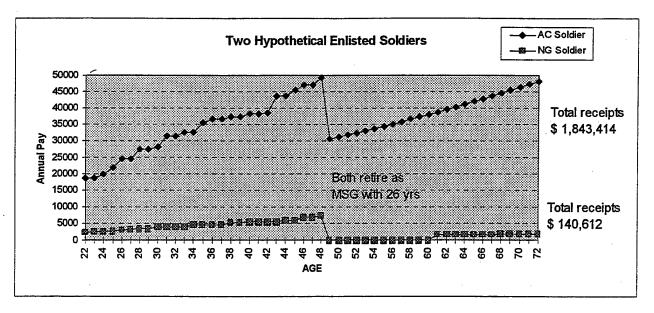


Figure 7 Enlisted Pay Comparison

These four cases highlight a striking similarity, the active component payroll cost is over ten times that of the reserve component counterpart. In twenty-six years of service an active component officer, using 1998 pay charts and assuming no pay raises until a 2% retirement Cost Of Living Allowance applies, costs over \$3 million dollars. The point is not that soldiers are paid too much or too little, it is that the *strategic* value of the active component versus the reserve component soldier is hardly ten fold.

Assuming that active soldiers are the only forward deployed deterrents and that they are better rapid responders, other missions are not as clear cut. In Major Theater War and many Operations Other Than War (OOTW) situations, whether the deployment day difference is 55 days or 155 days, both force structures are required to accomplish the mission. This ten fold

cost difference multiplied times the soldiers in 8 or 10 divisions is difficult to ignor. Especially when the nation is constrained in meeting the majority of strategic missions. It can be mitigated, but only through cooperation and trust within the Department of Defense and the Department of the Army.

Whether comparing division equivalents, end strength, deployable strength, accession cost, unit cost or soldier cost, Arithmetic factors favor the reserve component. The Arithmetic advantages of reserve component combat forces can be applied to a total force structure which leverages the strengths of the reserve component and the active component. This leverage can be the key to meeting the challenges of national and global constraints.

## CONCLUSION

Considering objectives, concepts and resources -Risk,
Relevance and Arithmetic-, reserve component combat units lend
essential leverage to the National Military Strategy. This
thesis recognizes a formula which necessarily uses interdependent
factors. The strategy must maximize each factor in order to
achieve balance. Reserve component combat unit contributions to
this maximization were argued from the reserve component
perspective. That this argument needed making, is both a
condition of change and an indictment of conditions.

The writer owes the impetus to answer the "Why do you want to be combat?" question to some exceptional active component

soldiers at the United States Army War College. The soldiers on each side of the question have engrained cultural perspectives which personally justify their divergent visions. This soldier's initial emotional responses of "warrior spirit", "militia tradition", "raison d'tre" and the like incited both the transmitter and the receiver. The empirical, statistical, experiential, academic, and research based conclusions of this paper should serve each participant in getting beyond emotions. For my part, complexity is more appreciated, risks are more feared and resolve is more justified. If my colleagues and responsible senior leaders can, in turn, use any of the foregoing to maximize the potential of the Total Force, fair enough. (5925)

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<sup>16</sup> James R. Blaker, "Understanding the Revolution in Military Affairs: A Guide to America's 21st Century Defense," <u>Progressive Policy Institute</u>, January 1997, 23 and Daniel Whiteside, "Why the Army National Guard? Why Now?," National Guard, August 1997,18.

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<sup>19</sup> Ralph Peters, "The Culture or Future Conflict," <u>Parameters</u>, Vol. XXV, No.4, Winter 1995-96.

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<sup>22</sup> Colin Powell, "Budget Woes, World Events Shape Military Strategy, Structure," Defense Issues, Vol. 8, No.13, 3.

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<sup>24</sup> Richard Cavazos, <u>Warfighter After Action Review for the 35th ID(M)</u>, dir., Leadership Development Center, Ft Leavenworth, Kansas, 1996 Videocassette.

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- <sup>34</sup> Richard L. West, "Prelude to Change, The FY 1998 Army Budget in Perspective," Army, May 1997, 29.
  - $^{35}$  Hackworth, 1.
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